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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/743,417	12/22/2003	Jeff Scott Eder	VM-56	7517

53787 7590 11/12/2008

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EXAMINER	
CHENCINSKI, SIEGFRIED E	
ART UNIT	PAPER NUMBER
3695	

MAIL DATE	DELIVERY MODE
11/12/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/743,417	EDER, JEFF SCOTT	
	Examiner	Art Unit	
	SIEGFRIED E. CHENCINSKI	3695	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 July 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *125-150* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *125-150* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *6/29/08,7/20/08,7/27/08*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. OBJECTION

The abstract of the disclosure is objected to because it contains references to the drawings which obscure the purpose of the Abstract (See MPEP § 608.01(b)).

No correction has been received in response to this request in the Office Action mailed July 1, 2008.

Correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 125-132 are rejected under 35 USC 101 because the claimed invention is directed to non-statutory subject matter.

Claims 125-132 recite a process of a predictive model comprising the steps of receiving data into a plurality of initial predictive models, selecting a best fit predictive model, to improve such model through stages and to develop a final predictive model. Based on Supreme Court precedent, a proper process must be tied to another statutory class or transform underlying subject matter to a different state or thing (*Diamond v. Diehr,* 450 U.S. 175, 184 (1981); *Parker* v. *Flook,* 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson,* 409 U.S. *63,* 70 (1972); *Cochrane* v. *Deener,* 94 U.S. 780,787-88 (1876)). Since neither of these requirements is met by the claim, the method is not considered a patent eligible process under 35 U.S.C. 101. To qualify as a statutory process, the claim should positively recite the other statutory class to which it is tied, for example by identifying the apparatus that accomplished the method steps or positively reciting the

subject matter that is being transformed, for example by identifying the material that is being changed to a different state.

Applicant is advised to satisfy the statutory requirements for the claims. Applicant is also advised not to add any new matter to the specification or the claims.

3. Claims 125-150 are rejected under 35 USC 101 the claimed invention lacks patentable utility. The output of a predictive model is not tangible and the claimed invention is not supported by either a clearly asserted utility or a well established utility.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 125-150 are rejected under 35 U.S.C. 112, first paragraph. Specifically, since the claimed invention is not supported by either a clearly asserted utility or a well established utility for the reasons set forth above, one skilled in the art clearly would not know how to use the claimed invention. The specification's guidelines for implementing the invention are filled with subjective judgments and lack a clear set of steps for implementing the invention. No two ordinary practitioners working independently would be able to replicate the end results of another practitioner who has used this invention because of the many subjective inputs and random model outcomes involved in this invention as described in the specification.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 125-150 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter

which applicant regards as the invention. The independent claims lack the structure needed to understand the invention. Manipulating general data with an unknown model is indefinite.

Declarations Under Rule 132

6. Applicant has submitted two declarations by Dr. Rick Rauenzahn and one declaration each by Mr. Gregory Cusanza and Dr. Peter Brous since the mailing of the most recent Office Action mailed June 18, 2008.

a) RAUENZAHN Declaration Received June 30, 2008 Re. Application 10/821,504:
The declaration under 37 CFR 1.132 is insufficient to overcome the rejection of claims 125-150 based upon Sandretto, Jost and Waite because Declarant does not refer to any aspect of the instant application. Further, Declarant does not claim to have experience in business administration, finance, marketing and other aspects relevant to business forecasting.

b) RAUENZAHN Declaration Received June 30, 2008 Re. Application 10/746,673:
The declaration under 37 CFR 1.132 is insufficient to overcome the rejection of claims 125-150 based upon Sandretto, Jost and Waite because Declarant does not refer to any aspect of the instant application. Further, Declarant does not claim to have experience in business administration, finance, marketing and other aspects relevant to business forecasting.

c) Cusanza Declaration Received June 30, 2008 Re. Application 10/645,099:
The declaration under 37 CFR 1.132 is insufficient to overcome the rejection of claims 125-150 based upon Sandretto, Jost and Waite because Declarant does not refer to any aspect of the instant application. Further, Declarant does not claim to have experience in business administration, finance, marketing and other aspects relevant to business forecasting.

d) BROUS Declaration Received June 30, 2008 Re. Application 10/287,586:
The declaration under 37 CFR 1.132 is insufficient to overcome the rejection of claims 125-150 based upon Sandretto, Jost and Waite because Declarant does not refer to any aspect of the instant application. Further, Declarant discusses a non patent literature reference which is not related to the rejections of the instant application.

Applicant Admitted Prior Art

7. Applicant has failed to traverse the examiner's Official Notice given in the last Office Action regarding the well known nature of renumbered dependent claims 2-62. Therefore, the limitations of claims 2-62 has become Applicant Admitted Prior Art

(AAPA) per MPEP MPEP 2104 C 2nd parag. - AAPA - Applic. Admission due to lack of or inadequate Travelsal:

If applicant does not traverse the examiner's assertion of official notice or applicant's traverse is not adequate, the examiner should clearly indicate in the next Office action that the common knowledge or well-known in the art statement is taken to be admitted prior art because applicant either failed to traverse the examiner's assertion of official notice or that the traverse was inadequate. If the traverse was inadequate, the examiner should include an explanation as to why it was inadequate.

Applicant has not properly met the traversal requirements of MPEP 2104 regarding the Official Notice taken in the last Office Action regarding claim 126 - induction algorithm; claim 28 - genetic algorithms; claim 130 – entropy minimization, LaGrange, Bayesian and path analysis; claim 131 – tournament use; and claim 132 – a transform predictive model. Consequently, these models are now Applicant Admitted Prior Art (hereafter AAPA).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 125, 126, 129, 133, 134, 137, 141, 144, 148-150 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sandretto (US Patent 5,812,988) in view of Jost et al. (US Patent 5,361,201, hereafter Jost) and Waite (US Patent 4,441,629).

Re. Claims 125, 133, 140 & 148, Sandretto discloses a computer-implemented predictive model method, apparatus, medium and computing infrastructure, comprising: receiving first input data into a plurality of initial predictive models (Fig. 1A-data storage;

Col. 14, data processing, entering estimates of economic variables; a plurality of models - Fig. 1; initial predictive models resulting in initial estimates - Col. 14, l. 40);

- receiving an input data set from said initial model configuration (Col. 14, l. 40 – initial estimates) and a second input data as inputs into a second model stage (Col. 14, ll. 47 – different estimates; recursive modeling – 44-45); and
- receiving said second model stage output as an input into a third predictive model stage to develop a final predictive model (Fig. 1; Col. 14, ll. 44-45; Col. 8, l. 52—col. 9, l. 19 – the iterative, recursive steps which has at least three or more stages in predictive modeling).

The following parts of the claim elements do not have patentable weight because they are non-functional descriptive material:

- to develop an initial model configuration by selecting a best fit initial predictive model using a tournament after a training of each predictive model type is completed;
- to develop an improvement to said initial model configuration as an output, said second input data comprising one of said first input data, data not included in said first input data, and a combination thereof;
- where said final predictive model supports a regression analysis.

Sandretto does not explicitly disclose an induction model. However, Jost discloses the use of induction modeling (Front page, OTHER PUBLICATIONS, Cronan, et. al.,) in the context of “Real Estate Appraisal Using Predictive Modeling” (Title).

Sandretto does not explicitly disclose use of a stepwise regression algorithm. However, Waite discloses use of a step-wise regression algorithm in the making of correlations and predictions (Col. 3, l. 46; Col. 8, ll. 7-8).

Therefore, an ordinary practitioner of the art at the time of Applicant’s invention would have seen it as obvious to have combined the disclosures of Sandretto and Jost in developing a computer-implemented predictive model method, apparatus, medium and computing infrastructure, motivated by a desire to provide a method for estimating simulated returns, asset values and risk measures using estimated financial variables

pertaining to an asset, such as economic variables and asset-specific characteristics (Sandretto, Col. 1, ll. 11-15).

Re. Claims 126-132, 134-139, 141-147, 149 & 150, Sandretto generally discloses operation in the context of the claimed methodologies. For example,

Re. Claim 125, 134 and 141, wherein said second model stage receives a second input data and an input data set from the initial model configuration and transforms said inputs into a summary comprising a second stage model output (Col. 14, ll. 31-61; Col. 8, l. 52—Col. 9, l. 19).

Re. Claim 129, 137 & 144, wherein an initial predictive model is linear regression (Col. 4, l. 66).

9. Claims 127, 128, 130, 131 & 132, 135, 136, 138, 139, 140, 142, 143, 145, 146 & 147 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sandretto in view of Jost and AAPA.

Re. Claims 127, 128, 130, 131 & 132, 135, 136, 138, 139, 140, 142, 143, 145, 146 & 147, the following modeling and analytical methodologies were AAPA at the time of Applicant's invention: 126 - induction algorithm; 128 - genetic algorithms; 130 – entropy minimization, LaGrange, Bayesian and path analysis; 131 – tournament use; and 132 – a transform predictive model.

Therefore, **re. claims 127, 128, 130, 131 & 132, 135, 136, 138, 139, 140, 142, 143, 145, 146 & 147,** an ordinary practitioner of the art at the time of Applicant's invention would have seen it as obvious to have combined the disclosures of Sandretto, Jost and AAPA in developing a computer-implemented predictive model method, apparatus, medium and computing infrastructure making use of numerous modeling and analytical methods, motivated by a desire to provide a method for estimating simulated returns, asset values and risk measures using estimated financial variables pertaining to an asset, such as economic variables and asset-specific characteristics (Col. 1, ll. 11-15).

Response to Arguments

10. Regarding the Applicant's arguments received on June 27, 2008, June 29, 2008 and July 1, 2008 with respect to the art rejections of claims 125-150 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments filed on June 27, 2008, June 29, 2008 and July 1, 2008 with respect to the rejections of claims 125-150 under 35 USC 101 and 112 have been fully considered but they are not persuasive.

ARGUMENT A: "The Assignee will respectfully traverse the rejection of claims 125 - 150 under §101 in two ways.

First, by noting that the Examiner has failed to establish a prima facie case of non utility.

Second, by noting that the assertions regarding the alleged lack of utility are not in compliance with the requirements of the Administrative Procedures Act and are therefore moot.

Third by noting that the claimed inventions transform transaction and text data into a different state or thing." (p. 2, ll. 19-24 ; p. 2, l. 17 – p. 4, l. 12).

RESPONSE:

1) The examiner's 101 rejection based on non utility within the definition of 35 USC 101 is based on the statutory definition of patentable utility which requires that a process transform the underlying matter into a different state or thing. Otherwise the process merely involves statutorily unpatentable mental steps (MPEP 2106,IV,B).

2) The examiner's rejections necessarily are compliant with the requirements of the Administrative Procedures Act since they follow the MPEP, which in turn is based on and cites precedencial court opinions.

3) The transformation argued by Applicant is inconsistent with judicial interpretation of the 35 USC 101 statute as defined and documented in MPEP 2106,IV,B.

ARGUMENT B: "The Assignee will respectfully traverses the §112 first paragraph rejection of claims 125 - 150 in three ways.

First, by noting that the Office Action has failed to establish a prima facie case that the specification does not meet the requirements of §112 first paragraph.
Second, by noting that the assertions regarding the alleged lack of written description are not in compliance with the both standards of the Administrative Procedures Act and are therefore moot.
Third by noting the rejections are non-statutory."(p. 4, ll. 19-24; p. 4, l. 19 – p. 7. l. 5).

RESPONSE:

1) 35 USC 112-1st paragraph requires that an invention must have patentable utility. Since the claimed invention fails to have patentable utility the claimed invention fails to meet this basic requirement of 35 USC 112-1st paragraph. Further, as cited in the rejection, the specification contains subjective steps such that two or more ordinary practitioners working independently could not use the claimed invention to come up with identical results when beginning with the same starting assumptions, which fails the requirement stated in MPEP 2106.IV.C.2(2)c). For example, the specification describes the formulation of an important component in the invention's valuation method as valuing intangible elements of value. It states that "Because elements of value by definition are not tangible, they cannot be measured directly. The y must instead be measured by the impact they have on their surrounding environment." (p. 12, ll. 2-5; p. 12, l. 1-27). This component of Applicant's invented method is necessarily subjective. Additional subjective components of Applicant's invention are found in the specification on p. 20, such as the following steps:

"1, Identify item variables …"

"2. create vectors that summarize the performance of the item variables"

"3. determine the appropriate cost of capital and value the organization and enterprise real options"

"4. determine the appropriate cost of capital, value and allocate the industry real options …"

"5. determine the expected life of each element of value and sub-element of value". (p. 20, ll. 3-13).

2) The examiner's rejections necessarily are compliant with the requirements of the Administrative Procedures Act since they follow the MPEP, which in turn is based on and cites precedencial court opinions.

3) The 35 USC 112, first paragraph rejections are statutory because they are based on proper application of the statute as evidenced in response B,1) above`.

ARGUMENT C: "The Assignee will respectfully traverses the §112 second paragraph rejection of claims 125 - 150 in three ways.
First, by noting that the Office Action has failed to establish a prima facie case that the specification does not meet the requirements of §112 second paragraph.
Second, by noting that the assertions regarding the alleged lack of written description are not in compliance with the both standards of the Administrative Procedures Act and are therefore moot.
Third by noting the rejections are non-statutory."(p. 7, ll. 10-15; p. 7, l. 10 – p. 8, l. 11).

RESPONSE:

1) As stated in the rejection in the last Office Action and repeated above, the rejection is based on unknown models. This means that the independent claims lack the structure needed to understand the invention. As it stands, the claims invention manipulates general data with one or more unknown models and is thus indefinite. For example, the first limitation of independent method claim 125 states "receiving data into a plurality of initial predictive models to develop an initial model configuration by selecting an input data set from the plurality of predictive models". As stated in the above rejections under 35 USC 112-1st paragraph, the specification does not provide concrete direction for the ordinary practitioner for using the model. Fig. 1 fully confirms the general, vague and indefinite nature of applicant's invention. Examples are "Soft Asset Management System Database (35), External Database (25), System Settings and Data Bots (200), Analysis Bots (300), Evaluate market sentiment (400) and numerous other components. Fig. 5D provides numerous additional indefinite and subjective process steps. Examples among many are Unmapped data Fields ? (206) and Metadata & Conversion Rules (702), just to name a few. Another indefinite aspect is the determination method steps for inputs. One example is on p. 55, ll. 1-15. this contains numerous vague and indefinite allusions to the determination of elements of value "defined by a population of members". The forecasting of member lives is vague, "determined by a "best" fit solution from a number of competing life estimation methods, all indefinite (3-7), as is the determination of the value of intellectual property (ll. 7-10).

All of this fails to conform to the requirements of 35 USC 112-2nd paragraph, the requirements of which are stated in the above rejection.`

2) The examiner's rejections necessarily are compliant with the requirements of the Administrative Procedures Act since they follow the MPEP, which in turn is based on and cites precedencial court opinions.

3) The 35 USC 112, second paragraph rejections are statutory because they are based on proper application of the statute as evidenced in response C,1) above`.

ARGUMENT D: "37 CFR 1.111 requires that the basis for amendments to the claims be pointed out after consideration of the references cited or the objections made. 37 CFR 1.111 states in part that:

In amending in response to a rejection of claims in an application or patent undergoing reexamination, the applicant or patent owner must clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. He or she must also show how the amendments avoid such references or objections.

The Assignee notes that this requirement is not relevant to the instant application because, as detailed above, there are no references or objections to avoid. Having said that, the Assignee notes that the primary reasons the prior set of claims were amended to put the claims in final form for allowance and issue. "(p. 8, ll. 12-23).

RESPONSE: Applicant has failed to meet this requirement since Applicant was responding to an Office Action which contained rejections of all active claims on the basis of specific prior art. Further, Applicant chose to maintain the rejected claims and to make specific amendments to two of the independent claims instead of cancelling these claims. Applicant therefore was required to "clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. He or she must also show how the amendments avoid such references or objections."

ARGUMENT E:

"**Request for affidavits under 37 C.F.R. 1.104"**(p. 8, ll. 24-27; p. 8, l. 24 – p. 10, l. 4).

RESPONSE:

The only information fitting Applicant's argument is the Official Notice taken in the last Office Action regarding several well known models, which Applicant did not traverse. These are now Applicant Admitted Prior Art. Contrary to Applicant's assertion on page that "there are no references or objections to avoid" (p. 8, ll. 20-21). In fact, the art rejections were based on the prior art of Sandretto and Jost under 35 USC 103(a), obviousness. Also, the last Office Action also contains an objection which Applicant has not responded to and which is repeated above.. Further, the rejections under 35 USC 101 and 112 contained appropriate rationale, and are further documented above with evidence and additional rationale. Therefore, no further documentation by way of affidavits from USPTO employees is appropriate under the rules under the MPEP have been followed in issuing the rejections in the last Office Action and in this Office Action.

COPENDING APPLICATIONS: The listing of Applicant's copending applications submitted in Applicant's response is acknowledged.

Conclusion

11. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Siegfried Chencinski whose telephone number is (571)272-6792. The Examiner can normally be reached Monday through Friday, 9am to 6pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Alexander Kalinowski, can be reached on (571) 272-6771.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks, Washington D.C. 20231

or Faxed to (571*)273-8300* [Official communications; including After Final communications labeled "Box AF"]

or Faxed to *(571) 273*-6792 [Informal/Draft communications, labeled "PROPOSED" or "DRAFT"]

Hand delivered responses should be brought to the address found on the above USPTO web site in Alexandria, VA.

SEC

October 29, 2008

/Narayanswamy Subramanian/
Primary Examiner, Art Unit 3695